

IN THE CLAIMS

Claims 1-11. **(Canceled)**

12. **(Currently Amended)** A driver for inserting a bone anchor into a bone, comprising:

a tip portion having a first diameter, the tip portion comprising:

a driver edge;

an external surface; and

a plurality of internal surfaces enclosing a driver recess, wherein the plurality of internal surfaces form a shape;

an insert retained in the driver recess and configured to be positioned at least partially within a threaded protrusion recess of a protrusion of the bone anchor to provide a friction fit between the driver and the bone anchor during insertion of the bone anchor;

~~wherein the driver recess is configured to retain an insert positioned at least partially within a threaded protrusion recess of the protrusion of the bone anchor to provide a friction fit between the driver and the bone anchor during insertion of the bone anchor;~~

a second portion adjacent the tip portion, the second portion having a second diameter, the second diameter greater than ~~the~~ a first diameter such that a rim is formed where the tip portion meets the second portion; and

wherein the tip portion is configured to be positioned ~~positions~~ around a the protrusion of a the bone anchor when the driver is used to insert the bone anchor into a bone, the driver edge configured to contact ~~contacting~~ a shoulder of the bone anchor during insertion.

13. **(Canceled)**

14. **(Previously Presented)** The driver of Claim 12, wherein the insert comprises silicon.

15. **(Currently Amended)** A driver for inserting a bone anchor into a bone, comprising:

a tip portion having a first diameter, the tip portion comprising:

a driver edge;

an external surface; and

a plurality of internal surfaces enclosing a driver recess, wherein the plurality of internal surfaces form a shape;

an insert retained in the driver recess and configured to be positioned at least partially within a threaded protrusion recess of a protrusion of the bone anchor to provide a friction fit between the driver and the bone anchor during insertion of the bone anchor;

a second portion adjacent the tip portion, the second portion having a second diameter, the second diameter greater than ~~the~~ a first diameter such that a rim is formed where the tip portion meets the second portion;

wherein the tip portion is configured to be positioned ~~positions~~ around a the protrusion of a the bone anchor when the driver is used to insert the bone anchor into a bone, the driver edge configured to contact ~~contacting~~ a shoulder of the bone anchor during insertion; and

wherein a distance between the driver edge and the rim is approximately equal to a distance between the shoulder of the bone anchor and an end of the protrusion ~~such that when the rim contacts a surface of the bone during insertion the end of the protrusion will be approximately level with the surface of the bone.~~

16. **(Original)** The driver of Claim 12, wherein the shape comprises a hexagonal shape.

Claims 17-41. **(Canceled)**

42. **(Currently Amended)** A driver for inserting a bone anchor into a bone, comprising:

a tip portion having a first diameter, the tip portion comprising:

a driver edge;

an external surface; and

a plurality of internal surfaces enclosing a driver recess, wherein the plurality of internal surfaces form a hexagonal shape;

a silicon insert retained in the driver recess and positioned at least partially within a threaded protrusion recess of a protrusion of the bone anchor to provide a friction fit between the driver and the bone anchor during insertion of the bone anchor;

a second portion adjacent the tip portion, the second portion having a second diameter, the second diameter greater than the first diameter such that a rim is formed where the tip portion meets the second portion;

wherein the tip portion positions around a protrusion of a bone anchor when the driver is used to insert the bone anchor into a bone, the driver edge contacting a shoulder of the bone anchor during insertion;

wherein the first diameter is approximately equal to a shoulder diameter of the shoulder of the bone anchor; and

wherein a distance between the driver edge and the rim is approximately equal to a distance between the shoulder of the bone anchor and an end of the protrusion ~~such that when the rim contacts a surface of the bone during insertion the end of the protrusion will be approximately level with the surface of the bone.~~

43 **(Canceled)**

44. **(Canceled)**

45. **(Previously Presented)** The driver of Claim 12, wherein the first diameter is approximately equal to a shoulder diameter of the shoulder of the bone anchor.

46. **(Currently Amended)** The driver of Claim 12, wherein a distance between the driver edge and the rim is approximately equal to a distance between the shoulder of the bone anchor and an end of the protrusion ~~such that when the rim contacts a surface of the bone during insertion the end of the protrusion will be approximately level with the surface of the bone.~~

47. **(Previously Presented)** A bone anchor, comprising:

a screw portion having a conical shape and being configured to penetrate a bone, the screw portion comprising:

a retention thread extending at least part of a length of the screw portion; and

a tip at a first end of the screw portion;

a first and a second cutting flute approximately 180° apart, each cutting flute extending at least part of a length of the screw portion through the retention thread; and

wherein the retention thread comprises a lead angle approximately equal to 50° and a trailing angle approximately equal to 80°, the lead and the trailing angle each being measured from a longitudinal axis of the screw portion;

a protrusion adjacent a second end of the screw portion, the second end opposite the first end of the screw portion, the protrusion comprising:

a plurality of external sides forming a hexagonal shape;

a rounded interior surface enclosing a protrusion recess, the rounded interior surface including a single, continuous recess thread extending a majority of a length of the protrusion recess, the recess thread being configured to rotatably retain a threaded fiducial marker component at least partially in the protrusion recess;

a top surface having a rounded edge;

wherein the protrusion has a maximum width approximately equal to 0.077 inch, the maximum width being less than a maximum diameter of the screw portion such that a shoulder is formed where the protrusion meets the second end of the screw portion;

wherein the shoulder further comprises a continuous shoulder surface extending around the protrusion, the entire shoulder surface being oriented generally perpendicular to the longitudinal axis of the screw portion; and

wherein the protrusion recess has an entrance comprising a chamfered interior surface; and

wherein the bone anchor has a length of approximately 0.20 inch.

Claims 48-51. **(Canceled)**